



DEPARTMENT OF THE ARMY  
NORTH ATLANTIC DIVISION, CORPS OF ENGINEERS  
FORT HAMILTON MILITARY COMMUNITY  
BROOKLYN, NEW YORK 11252-6700

REPLY TO  
ATTENTION OF

CESAD-DE

S: 15 Nov 2004

SEP 28 2004

MEMORANDUM FOR

COMMANDER, BALTIMORE DISTRICT  
COMMANDER, NEW ENGLAND DISTRICT  
COMMANDER, NEW YORK DISTRICT  
COMMANDER, NORFOLK DISTRICT  
COMMANDER, PHILADELPHIA DISTRICT  
COMMANDER, EUROPE DISTRICT

Subject: Safety Management Action Plan (SMAP) 05-06 - Command Leadership

1. Reference Memorandum, CESO, dated 24 May 2004, subject: Safety and Occupational Health Emphasis - Command Leadership (encl 1)
2. The USACE Commander's memorandum, reference 1, discusses the Presidential "SHARE" initiative and the Secretary of Defense challenge to reduce mishap and accident rates by fifty percent over the next two years. It challenges the Corps to reduce accidents, lower workplace and lost-time injury rates, improve reporting of accidents and injuries, and decrease the time away from work due to injuries. It also forwards the USACE SMAP for FY 05 and 06 and institutes new metrics for the safety and occupational health program. I fully support these objectives and expect North Atlantic Division to be a leading Corps Division in adopting innovative methods to achieve these reductions in accidents and injuries.
3. Attached at enclosure 2 is the North Atlantic Division Safety Management Action Plan for FY 05 and 06. It is keyed by paragraph numbers and bold type to the USACE SMAP. I want to stress several of the items in the SMAP.
  - a. District Commanders must be personally involved in the Safety and Occupational Health program. We cannot significantly reduce our accident rates without Command Leadership.
  - b. We must reduce the number of fatalities and serious accidents occurring in our AOR.
  - c. Commanders must assure that accidents are promptly reported and thoroughly investigated in accordance with USACE requirements and my guidance. This is especially true for fatalities and serious accidents.

CENAD-DE

SUBJECT: Safety Management Action Plan (SMAP) 05-06 - Command Leadership

d. Commanders will conduct collateral investigations for fatalities (government and contractor), for property damage accidents over one million dollars, and for those accidents that have potential for litigations for or against the government or government contractor.

e. Dredging is a high hazard activity that we will target. Accidents by our dredging contractors must be reduced. District shall implement at least one initiative to reduce dredging accidents. For those harbors/inlets that have experienced serious accidents such as over turned tugs, anchor barges or other floating plant or fatalities/permanent partial disability accidents because of harbor /inlet conditions, a team shall write a specific guide specifications for each of these inlets and harbor dredging projects. The purpose of the guide specification is to control the risk and increase the safety of the dredging by identifying locations in the Federal channel requiring minimum equipment requirements. The guide specification shall be based upon USACE, coast guard, port authority, and coastal pilots knowledge of each harbor. (Additional information is provided at enclosure 2 to this SMAP. For further information on this initiative that has been successfully implemented at 13 harbors/inlets in Jacksonville District, contact Mr. Phil Bates, CESAJ-CO-CQ, 904 232-1196.)

4. Request that you forward your SMAP to reach the Division and my HQs Forward Safety Engineer, Gary King by 15 Nov 2004. Also please keep Gary King and me informed by e-mail every six months on the status of your SMAP. Please include any supporting documentation for individual action items as attachments. With your personal involvement we will make a difference.

Cdrs: *With your support, our  
region will enjoy a  
safer year for all!*  
Encls

*Merdith W. B. Temple*  
MERDITH W. B. TEMPLE  
Brigadier General, USA  
Commanding

**NORTH ATLANTIC DIVISION  
SAFETY MANGEMENT ACTION PLAN (SMAP)  
SMAP 2005-2006**

**Commander's Intent:** The North Atlantic Division (NAD) will aggressively strive to meet the new metrics established for accident rates in the Consolidated Command Guidance. Fatalities and serious accidents will not be business as usual. We will investigate, analyze and make management and or supervisory changes as needed to prevent a recurrence. We will institutionalize the corrective actions and share the lessons learned. Safety will be in the forefront in all we do.

Commanders, including myself, will be personally involved in the Safety and Occupational Health Program. We will be the Safety Officers for our Commands. My Deputy Commander, Colonel Francis X. Kosich and my Director of the Regional Business Directorate, Mr. Mohan Singh will serve as co-PMs to lead NAD's safety and occupational health initiatives.

Commanders shall ensure that sufficient resources are available to accomplish these SMAP actions. For Districts with limited safety and occupational health manpower, contracting for specific safety and occupational health tasks or the increased use of Corps Centers of Expertise or other district's safety and occupational health resources may be required.

**The Division Commander will:**

Hold District Commanders accountable for their district safety and occupational health programs.

Include safety and health in speeches, Town Hall meetings, site visits, and at other opportune times.

Provide regional safety and health guidance and direction.

**The HQ-Forward Safety Engineer will:**

Monitor and assist accomplishment of action items in NAD and District SMAPs.

Review accident trends, analyses, and causes and share lessons learned to preclude similar accidents.

Keep the Commander apprised of safety issues and concerns.

**NAD Staff will:**

Assure that safety and health is an integral part of the business processes for mission accomplishment.

Assure through command inspections within project management that safety and health are being integrated into the PMBP process.

## **District Commanders will:**

### **1. Command leadership.**

#### **Accountability**

Develop a SMAP for FY05-06, establish milestones, and track the status of actions, to include quarterly reviews to assure objectives are being accomplished. Inform the Division Commander every 6 months on the status of the SMAP implementation.

Assure that collateral investigations are conducted for all Class A accidents and for accidents that have the potential for government or contractor liability.

Target areas of improvement based upon a review of the past six years of accident data.

Require staff chiefs to brief at staff or other meetings all injuries and accidents that occurred in their area of responsibility and the management actions that have been taken to prevent similar accidents.

Assure, through personal review, that all recordable accidents are thoroughly investigated and that follow-up actions are conducted to assure that corrective actions are implemented.

Assure that fatalities and serious accidents, as defined in AR 385-40, are briefed to the Division Commander (and then the USACE Commander for government fatalities) in a timely manner. Board Reports, with forwarding letter, should reach the Division Office within 35 days of the accident.

#### **Speeches**

Discuss safety in speeches, staff meetings, and field visits.

#### **Training**

Assure that at least 90 per cent of dredging QAs have attended the dredging safety course or equivalent training.

Assure that at least 90 per cent of the construction QAs have received quality training on the new safety manual.

Assure that the District has a tracking method in place to assure that government employees are receiving their safety and occupational health training required to perform their jobs safely. Assure that the required training is being provided.

## **High Hazard Activities**

Shall report contractor accidents, exposure hours, and frequency rates to the Division quarterly for following types of contractor work: construction, dredging, service, and total contractor. This will provide a focus on high hazard types of contractor work both at the district and Division level.

Shall identify government field activities and offices for ergonomic review and analysis, conduct analyses, and implement recommendations. .

## **Inspections**

Assure that safety and occupational health self-inspections of Corps facilities are conducted at least annually.

Assure that district safety and occupational health offices conduct annual safety and occupational health inspections at government facilities/activities. High hazard areas should be conducted at least twice a year. Identify an inspection frequency for contractor activities and assure that district safety and occupational health offices conduct the required inspections.

Assure that the Safety and Occupational Health Office staff conducts annual safety management evaluations.

Assure that safety items are integrated into district quality assurance inspections.

## **Celebrate Successes**

Recognize safety successes through District safety and occupational awards and recognition programs.

Share safety initiatives and safety successes with other Districts.

### **Each District will:**

#### **2. Civilian Employee Accident Prevention and Loss Control**

Analyze government employee accident data covering the past six years and use this data to target high hazard areas and countermeasure programs.

Implement a fall prevention program for government accidents. This shall include increased self and Safety and Occupational Office inspections to assure that housekeeping is in order and that aisles are clear of hazards.

Implement a countermeasures (initiative) program above and beyond the normal accident prevention efforts for the two accident types resulting in the highest frequency rate during the last six years. This is in addition to fall protection, if fall prevention is in the top two.

Review the work practices of those working alone. Provide guidance to the field so that Position Hazard Analyses may be updated to reflect the new guidance.

Ensure that an active and effective light duty program is in place.

Assure that Activity Hazard Analyses and Position Hazard Analyses are being updated and used.

### **3. Project Management (Focus on Design and Construction)**

Analyze contractor accident data covering the last six years and use this data to target high hazard areas and countermeasure programs.

Implement a fall prevention program for contractor accidents. This shall include increased inspections to assure that housekeeping is in order and that aisles ways are clear of hazards.

Implement a countermeasures (initiative) program above and beyond the normal accident prevention efforts for the two accident types resulting in the highest frequency rate during the last six years of contractor work. This is in addition to fall protection, if fall prevention is in the top two.

Conduct annual peer reviews of safety program implementation at those field offices, or any offices managing dredging or construction, with high accident rates or poor safety management evaluations. Other similar offices or districts will conduct the peer review.

Review and accept all Accident Prevention Plans prior to the initiation of work. (1.A.11, EM 385-1-1)

Dredging is a high hazard activity that we will target. Accidents by our dredging contractors must be reduced. Districts shall implement at least one initiative to reduce dredging accidents. A guide specification shall be prepared for those harbors/inlets that have experienced serious accidents such as sunken or over turned tugs, anchor barges or other floating plant or accidents resulting in fatalities or permanent partial disability because of harbor /inlet conditions. The purpose of these guide specifications is to control the risk and increase the safety of dredging operations by identifying locations in the Federal channel requiring minimum equipment requirements. The guide specifications shall be based upon USACE, Coast Guard, Port Authority, and coastal pilots knowledge of each harbor. (Additional information is provided at enclosure 2 to this SMAP. This initiative has been successfully implemented at 13 harbors/inlets in Jacksonville District. For further information contact Mr. Phil Bates, CESAJ-CO-CQ, 904 232-1196.) .

Integrate safety engineering and management early in each project by establishing District policy to include the following as a minimum.

a. Industrial Hygienists will be on PDTs for HTRW and renovation projects with any likelihood of chemical contamination, asbestos or lead.

b. Independent technical review (ITR) team members are responsible for safety and occupational health (SOH) within their specialty.

c. Life Safety Code shall be included as a specialty when applicable.

d. The ITR Teams will document comments and the resolution of all SOH issues.

e. Biddability, Constructibility, Operability, and Environmental Review will address and consider SOH issues.

f. An SOH specialty team member will be assigned to ITR teams for HTRW projects, renovation projects, projects with SOH issues caused functional specialty interfaces, or other projects with significant SOH issues or hazards.

g. One PDT member will always be assigned overall responsibility for SOH. Based upon project type, a functional PDT member, e.g. structural engineer, with the most significant safety concerns, shall be assigned responsibility for safety if a safety or industrial hygiene professional is not on the PDT. If a person is not specifically assigned, then the project manager shall assume responsibility for safety.

h. An SOH office team member shall train PDT members on Facilities Systems Safety and SOH requirements in the project management business process.

#### **4. Public Recreation Safety**

Analyze accident data for recreational related public fatalities covering the last six years. and use this data to target initiatives at District and project level.

Increase contact time with the public (boat patrols, car patrols, state enforcement,) to prevent recreational related public fatalities.

## SAMPLE SOH INSPECTION SMAP ITEM

**ACTION:** The Safety and Occupational Health Office will conduct annual safety and occupational health inspections of government facilities.

**RESPONSIBLE OFFICE:** Safety and Occupational Health

### MILESTONES:

1. Identify government facilities to be inspected by 30 Nov 04.
2. Develop inspection plan by 31 Dec 04.
3. Track individual inspection completion on excel spreadsheet. Periodically review status and make changes as needed to assure accomplishment.



## DREDGING GUIDE SPEC SMAP ACTION

**ACTION:** Each District shall review past accident experience to determine those harbors/inlets that experienced serious accidents such as sunken or over turned tugs, anchor barges or other floating plant or accidents resulting in fatalities or permanent partial disability accidents because of harbor /inlet conditions.

. A guide specification shall be prepared for those harbors/inlets that have experienced those types of serious accidents. The purpose of these guide specifications is to control the risk and increase the safety of dredging operations by identifying locations in the Federal channel requiring minimum equipment requirements. The guide specifications shall be based upon USACE, Coast Guard, Port Authority, and coastal pilots knowledge of each harbor.

**RESPONSIBLE OFFICE:** CONSTRUCTION/OPERATIONS

### MILESTONES:

1. Each District Commander shall appoint a Dredging Team consisting of at least one representative each from construction, operations, engineering, and the District Safety and Occupational Health (SOH) Office NLT 31 Dec 04.
2. Each District Dredging Team shall complete an initial hazard assessment of all of its dredging project locations and an accident analysis to review locations of sinkings, overturned vessels, fatalities, permanent partial disabilities and other serious accidents. The assessments will determine the dredging projects at specific locations that can potentially be made safer by limiting the type of dredging equipment NLT 31 Mar 05.
3. Each District will forward its plan of action to complete the Dredging SMAP action to the NAD Commander NLT 31 Mar 05. This plan shall include the list of project locations that can potentially be made safer by limiting the type of dredging equipment and the deadlines for preparing additional district dredging guide specifications for each of these locations.

### BACKGROUND:

The traditional approach to preventing dredging accidents has been to modify the behavior of workers so that they avoid unsafe work practices. The results of this approach failed to prevent many accidents that could have been avoided by engineering controls. During the period FY 95 thru FY 99, South Atlantic Division had 116 recordable employee injury accidents, including five fatalities, at its dredging projects. One-hundred (86%) of these accidents occurred at Cutterhead dredging projects, eleven (9.5%) of them occurred at Clamshell dredging projects, and only five (4.3%) of them occurred at Hopper dredging projects.

During the 1990's Jacksonville District experienced three fatal contract-dredging accidents that could have been prevented by the use of safer equipment. During FYs 98 thru 00, cutterhead dredging accounted for 48% of that district's 29 dredging projects, but 65% of the district's dredging accidents and 100% of its fatalities. Given this information, Jacksonville District decided to take a new approach to dredging

safety; and identified the contributing factors for dredging accidents that can be engineered out of dredging projects. The District then developed additional district design guide specifications for each dredging project location that had hazardous conditions warranting the use of less hazardous methods of dredging.

Jacksonville District created a Dredging Safety SMAP Team consisting of the Assistant Chief, Construction-Operations Division (CON-OPS); representatives from the Navigation Section and Quality Assurance Section; (CON-OPS); design engineers from the Engineering Division (EN); a SOH Office representative, and advisors from the Contracting and Planning Divisions. The team conducted hazard assessments of 15 harbors/inlets where USACE dredging is conducted and considered selecting and/or restricting equipment based on wave heights, currents, turbulence, water depths, weather conditions, waterway traffic, and other navigational hazards at different times of the year. The Dredging SMAP Team spent three years obtaining hydrological, weather, navigational and other information. They developed safety recommendations at face-to-face meetings with the U.S. Coast Guard, port authorities, coastal pilot associations, and the dredging industry. In order to ensure funding was available for this SMAP action, the SMAP Team reviewed each dredging project for possible changes during the year that project became active. Consequently, the SMAP took several years to complete.

After the team's design engineers developed draft guide specifications for affected dredging locations, the team obtained concurrences for these specifications not only from the District offices involved in dredging but also from the governmental agencies and dredging industries potentially affected by them. The final result was that the team prepared and obtained approval for additional district guide specifications for each selected harbor/inlet. These specifications included the following:

- a. Certification Required Line-Coast Guard Inspected – Only dredges with a current USCG Certificate of Inspection shall be permitted to work seaward of this line under the contract.
- b. Certification Required Line-Load Line – Only dredges having a current Load Line Certification issued per 46 CFR 41-47 shall be permitted to work seaward of this line under the contract.
- c. Certification Required Line-Hopper - Only hopper dredges with a current USCG Certificate of Inspection shall be permitted to work seaward of this line under the contract.

The Dredging Safety SMAP Team also developed and obtained approval of additional dredging guide specifications that required minimum size, horsepower, and availability requirements for tugboats supporting Cutterhead operations and a current marine survey inspection certificate for all supporting floating plant, except for pipeline support platforms, floats, and outboard powered skiffs less than 16 feet in length.

As a result, Jacksonville District's contract specifications for dredging now prevent Cutterhead dredges from working in turbulent waters and other hazardous areas where these dredges, with their auxiliary plant and equipment, cannot safely operate. The success of Jacksonville District's efforts is self-evident. The district has not had a dredging fatality since the establishment of the Dredging Safety SMAP Team and has not had any dredging accidents FY 04.